

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 7016-9 (2003): Methods of Test for Coated and Treated Fabrics, Part 9: Rubber-or Plastics-Coated Fabrics - Determination of Blocking Resistance [PCD 13: Rubber and Rubber Products]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE



भारतीय मानक

लेपित एवं उपचारित कपड़े की परीक्षण पद्धतियाँ

भाग 9 रबड़- अथवा प्लास्टिक-लेपित कपड़ा – ब्लाकिंग प्रतिरोधिता ज्ञात करना

(दूसरा पुनरीक्षण)

Indian Standard

**METHODS OF TEST FOR COATED AND
TREATED FABRICS**

**PART 9 RUBBER- OR PLASTICS-COATED FABRICS—
DETERMINATION OF BLOCKING RESISTANCE**

(Second Revision)

ICS 59.080.40

© BIS 2003

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

NATIONAL FOREWORD

This Indian Standard (Part 9) (Second Revision) which is identical with ISO 5978:1990 'Rubber- or plastics-coated fabrics — Determination of blocking resistance' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendations of the Rubber and Rubber Products Sectional Committee and approval of the Petroleum, Coal and Related Products Division Council.

This standard was first published in 1981 and revised in 1988. In the first revision the dimension of test piece, mass of weight-piece, requirements of air oven and time interval between manufacture and testing had been modified. Test procedure for determination of blocking resistance had been elaborated in order to make it more clear aligning with ISO/DIS 5978:1986 'Rubber- or plastics-coated fabrics — Determination of blocking resistance' The Committee, therefore, decided to revise this standard to completely align with ISO 5978:1990.

The text of ISO Standard has been proposed to be approved as suitable for publication as Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to the following International Standard for which no Indian Standard exists.

<i>ISO No.</i>	<i>Title</i>
ISO 2231: 1989	Rubber - or plastics-coated fabrics — Standard atmospheres for conditioning and testing

In case of ISO 2231: 1989, the Committee, responsible for the preparation of this standard took cognizance of this standard and decided that it is acceptable for use in conjunction with this standard.

For tropical countries like India, the standard temperature and the relative humidity shall be taken as $27 \pm 2^{\circ}\text{C}$ and 65 ± 5 percent respectively.

Indian Standard
**METHODS OF TEST FOR COATED AND
TREATED FABRICS**
**PART 9 RUBBER- OR PLASTICS-COATED FABRICS—
DETERMINATION OF BLOCKING RESISTANCE**
(Second Revision)

1 Scope

This International Standard specifies a method for the determination of the resistance of rubber- or plastics-coated fabrics to blocking.

The method specified is acceptable in most cases. If it is desired to use conditions other than those specified, these may be mutually agreed between the contracting parties but such variations shall be stated in the test report.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2231:1989, *Rubber- or plastics-coated fabrics — Standard atmospheres for conditioning and testing.*

3 Definition

For the purposes of this International Standard, the following definition applies.

blocking: An unintentional adherence between materials.

[Definition taken from ISO 472:1988, *Plastics — Vocabulary.*]

4 Apparatus

4.1 Glass plates, measuring approximately 150 mm × 150 mm × 3 mm.

4.2 Weight-piece, of mass 5,0 kg.

4.3 Circulating-air oven, of such a size that the total volume of the test assemblies does not exceed 10 % of the free space in the oven.

Provision shall be made for placing the test assemblies on shelves so they are not less than 50 mm from each other or from the sides of the oven.

The nature of the source of heat is optional but the source shall be located in the air supply of the oven.

Provision shall be made for circulation of air through the oven at a rate such as to provide a minimum of six air changes per hour.

The temperature of the oven shall be thermostatically controlled to maintain the temperature of the test assemblies within ± 2 °C of the specified temperature.

Baffles shall be used as required to prevent overheating and dead-spots.

5 Time interval between manufacture and testing

5.1 For all purposes, the minimum time between manufacture and testing shall be 16 h.

5.2 For non-product tests, the maximum time between manufacture and testing shall be four weeks, and for evaluations intended to be comparable, the tests, as far as possible, shall be carried out after the same time interval.

5.3 For product tests, whenever possible, the time between manufacture and testing shall not exceed three months. In other cases, tests shall be made within two months of the date of receipt by the customer.

6 Samples and test pieces

6.1 Samples shall be taken not less than 1 m from the end of the roll.

6.2 The test pieces for each sample to be tested shall consist of six specimens, each 150 mm × 150 mm.

6.3 Test pieces shall be representative of the material being tested. They shall be taken from the working width of the sample. They shall be cut with one edge parallel to the longitudinal axis of the sample.

The longitudinal and lateral axes shall be marked on the test pieces.

7 Conditioning of test pieces

The test pieces shall be conditioned in one of the standard atmospheres as defined in ISO 2231.

8 Procedure

8.1 Arrange the test pieces in pairs, back to back, face to face and back to face, to form a pile 150 mm square. Place the test pieces thus arranged between two glass plates (4.1). Place the 5,0 kg weight-piece (4.2) on the top plate in a position to ensure an even distribution of pressure.

8.2 Expose the test assembly for 3 h at a temperature of $70\text{ °C} \pm 2\text{ °C}$ in the oven (4.3).

8.3 At the end of the exposure period, remove the test assembly from the oven, immediately take the test piece from between the plates and allow it to cool for 1 h. Then carefully separate the test pieces and examine them for adherence or peeling of the coatings.

8.4 Rate the resistance of each test piece to blocking by the scale given below:

1 — No blocking: coated surfaces separate without any evidence of adhering.

2 — Slight blocking: some adherence of coated surfaces takes place on separation, but without detriment to the coating.

3 — Blocking: coated surfaces are difficult to separate; the coating or part of the coating is removed during separation.

9 Test report

The test report shall include the following particulars:

- a) a reference to this International Standard;
- b) all details necessary for the identification of the sample;
- c) the conditioning atmosphere used (see clause 7);
- d) the total mass on the test piece;
- e) the rating for resistance to blocking, in accordance with 8.4;
- f) any departure from the procedure specified.

Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act*, 1986 to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Director (Publication), BIS.

Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Catalogue' and 'Standards: Monthly Additions'.

This Indian Standard has been developed from Doc: No. PCD 13 (1989).

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002
Telephones: 2323 0131, 2323 3375, 2323 9402

Telegrams: Manaksanstha
(Common to all offices)

Regional Offices:

Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg
NEW DELHI 110002

Telephone

{ 2323 7617
{ 2323 3841

Eastern : 1/14 C.I.T. Scheme VII M, V.I.P. Road, Kankurgachi
KOLKATA 700054

{ 2337 8499, 2337 8561
{ 2337 8626, 2337 9120

Northern : SCO 335-336, Sector 34-A, CHANDIGARH 160022

{ 60 3843
{ 60 9285

Southern : C.I.T. Campus, IV Cross Road, CHENNAI 600113

{ 2254 1216, 2254 1442
{ 2254 2519, 2254 2315

Western : Manakalaya, E9 MIDC, Marol, Andheri (East)
MUMBAI 400093

{ 2832 9295, 2832 7858
{ 2832 7891, 2832 7892

Branches : AHMEDABAD. BANGALORE. BHOPAL. BHUBANESHWAR. COIMBATORE. FARIDABAD.
GHAZIABAD. GUWAHATI. HYDERABAD. JAIPUR. KANPUR. LUCKNOW. NAGPUR.
NALAGARH. PATNA. PUNE. RAJKOT. THIRUVANANTHAPURAM. VISAKHAPATNAM.